

### **ABSTRACT**

A nitride read only memory (NROM) cell can be programmed by applying a ramp voltage to the gate input, a constant voltage to one of the two source/drain regions, and a ground potential to the remaining source/drain region. In order to erase the NROM cell, a constant voltage is coupled to the gate input. A constant positive current is input to one of the source/drain regions. The remaining source/drain region is either allowed to float, is coupled to a ground potential, or is coupled to the first source/drain region